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AUTHOR Martin, Cora Ann
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ABSTRACT

The followup study updates information originally presented in "A Report of the Survey to Measure Nursing Needs and Resources in Nebraska, 1950-1951." After explaining the method used to obtain the data and its limitations, several factors are cited affecting the determined needs. Tabulated data are presented as the basis for comments in the following areas: inventory of current professional nurse supply in Nebraska; demographic and educational characteristics of the registered nurse and licensed practical nurse supply; demographic characteristics of registered and practical nurses employed in hospitals, federal agencies, religious orders, and other institutions; demographic characteristics of unemployed nurses; and nursing needs in relation to the population, number of hospital beds, further education, and types of employment. The inventory concludes with an evaluation of Nebraska's schools of nursing (characteristics of the student nurse population, the faculty, and of the schools themselves, library facilities, financial factors, and curriculum) and a statement of need. One appendix is devoted to the application for renewal of license forms for nurses another with the number of personnel hospitals, and the third with tables on personnel data. (AG)

NEBRASKA'S NURSE SUPPLY, NEEDS AND RESOURCES: 1966

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Cora Ann Martin

Section of Hospitals and Medical Facilities
Nebraska Department of Health

March 1967

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NEBRASKA'S NURSE SUPPLY, NEEDS
AND RESOURCES: 1966

An Inventory of Nebraska
Nurses with an estimate
of nursing needs and a
survey of educational
facilities now available
to supply these needs

Cora Ann Martin, Ph.D.

Section of Hospitals and Medical Facilities
Nebraska Department of Health

March 1967

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C. A. M.

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Part I

INTRODUCTION

The motto for the 1950-51 committee appointed to survey the nursing needs and resources in Nebraska was "Action without study is fatal; study without action is futile." The report¹ issued by this committee, prepared with the cooperation and help of over one hundred Nebraska nurses, identified a number of areas in which needs were considered most acute. Specifically, four areas were singled out for priority action: (1) higher academic preparation for instructors in schools of nursing, (2) expanded facilities for training practical nurses and state licensure of practical nurses, (3) recruitment and training for acute nurse shortages in the fields of psychiatry, public health and tuberculosis, and (4) recruitment of more men into nursing.²

Fifteen years have passed since the report was issued in 1951. Nurses recognized the need for a new study to ascertain the degree to which the report had fulfilled its purpose of not merely pointing out deficiencies but also serving as an impetus toward and a basis for action. Further, in our society change is rapid. The impending implementation of Medicare for citizens over age 65 pointed up in an acute form the rate of change in the health field. The facts which served as a basis for action fifteen years ago are totally inadequate today. Therefore, the Nebraska Nurses Association proposed a study to bring up-to-date the picture of the nurse supply, nursing needs and the resources for meeting them in Nebraska.

The Governor's Committee on Medicare was also concerned with the health resources of Nebraska. The Medicare program was expected to greatly increase the need for trained medical personnel in all fields. It was in answer to these concerns and with the cooperation of the Nebraska Nurses Association, the Governor's Committee on Medicare, and the Nebraska State Department of Health that an assessment of Nebraska's nursing supply, needs, and resources was done.

¹A Report of the Survey to Measure Nursing Needs and Resources in Nebraska, 1950-1951.

²Summary Report of a Survey to Measure Nursing Needs and Resources in Nebraska 1950-1951.

Method

Data were obtained from a number of sources. Demographic data on Nebraska nurses were available from the licensing renewal forms which are issued by the State Board of Nurse Examiners. Since licensing is required of both professional and practical nurses in the state, data could be obtained for both levels of nurses for all nurses registered in Nebraska, both active and inactive, as of 31 January 1966. To supplement this source data were obtained from all Federal hospitals on professional and practical nurses who were working in Nebraska on 31 January 1966 and who were registered in other states.³

Another source of data was the licensing form of all hospitals in the state. These were made available by the State Department of Health, Hospital Division. Included in the licensure application was information on total number of nurses (at all levels) employed in the hospital as well as budgeted but unfilled positions as of 31 December 1965.

The state office of the United States Public Health Service gave an estimate of budgeted and unfilled positions in the various public health agencies of Nebraska. Finally, the directors of schools of nursing provided information about their educational facilities and personnel, as well as information about educational careers and work patterns of their graduates.

Limitations of the Data

It is necessary to recognize the limitations of the data. The greatest source of error is in reporting. The data obtained from the nurse registration cards had errors of omission⁴ as well as errors in the data reported. One hundred eighteen professional nurses report that they hold an Associate Arts degree. This is thought to be a considerable overestimation. If nurses did not report their education, they were assigned to the category of "diploma" so that there doubtless exists some underreporting of baccalaureate and master degree nurses. The error in the reporting of higher academic preparation is, however, thought to be minimal.

Originally it was hoped to do a separate analysis of nurses employed full time or part time. However, many nurses failed to report this aspect of their employment status. Therefore, all nurses--whether full time or part time employed--were treated simply as "employed."

³Seventy-eight RN's were employed in Nebraska on 31 January 1966 who were registered out of state.

⁴For example, 286 professional nurses did not give their age, 23 did not give their marital status, etc.

A second source of possible error in reporting concerns the hospital reports of nursing personnel. These reports are submitted by the hospital administrator in his application for renewal of license. There is no way to estimate the accuracy of these reports. Cross tabulation to assess the reliability of these data comparing self reports and hospital reports is not possible because they represent different time periods.

All data were coded by two coders working independently and differences in coding were resolved by recourse to the original data source. Errors in punching data into cards were reduced by verifying all cards. Analysis was done by computer with checks for internal consistency to reduce error.

In summary, it is thought that with the exception of those erroneously reporting associate degrees and some lack of clarity in the definition of areas of clinical practice (discussed below) the errors in the data are within tolerable limits. Where errors are known to be large, categories have been expanded to encompass the looseness of the data.

Problems in Definition of Need

There are difficulties inherent in establishing any basis for an estimate of "need" for various levels of nursing personnel. Numerous factors must be taken into consideration. For example, not only size of population, but geographic distribution is important. Very small health facilities do not efficiently use highly trained personnel. One nurse supervisor can supervise a unit with three employees, with twenty, or with more depending on the organization of the facility. On the other hand, there is the human value of having medical facilities close at hand so that contact with the patient's family is maintained. The relative importance of these two factors must be assessed on other than demographic evidence.

Needs are often projected by estimating change in population size and composition. But shifts of population from rural to urban areas call for a redistribution of health facilities. Rural immigrants to urban areas soon become acculturated to urban fertility norms, etc. Thus more than a simple projection on the basis of quantitative measures of population size is necessary. Further the changing age composition of the population necessitates alterations in planning for future health needs.⁵

⁵Twelve per cent of the population of Nebraska was 65 years of age or over in 1965 and this proportion will increase in the next decade. (Based on population estimates from United States Department of Commerce, December 1966, Series T.25.)

Even the architectural features of health facilities are a factor. Old facilities which do not have such personnel-saving devices as two-way communications to the bedside, electronic patient monitoring equipment, pneumatic delivery systems, etc., require more nursing personnel. The organization of patient care--e.g., size of the wards, availability of intensive care units, and organization of nursing services--all affect the desirable nurse/patient ratio.⁶

The subjective "need" identified by the patient must be taken into account. The literature, both popular and professional, is replete with examples of patients who were dissatisfied with the nursing care they received while in a hospital. Sometimes these were cases of actual neglect, but often they resulted from a discrepancy between the expectations held by the patient for personal service and the nurses' definition of the amount of patient care which the situation demanded.

Then there is the "need" which is identified by the professional in the field who uses a formula based upon a nurse/patient ratio for the total population, or a "standard" number of hours of nursing care for various categories of patient. While this type of estimate is beneficial for estimating staffing needs, it does not take into account some of the variables mentioned above.

This listing of factors which affect nursing needs is not exhaustive. Any professional in the field can identify important omissions. It does, however, serve to point up the difficulty of making estimates of "needs" for the present--to say nothing of projecting these needs into the future.

For purposes of this study, several estimates of "needs" will be used. One is budgeted but unfilled positions. These unfilled positions have been reported by hospital administrators, directors of nursing schools, and the Public Health Service. Almost certainly they underestimate the need, for it is likely that administrators keep their estimates within the reasonable limits of their expectation of having the positions filled.

Another is based on ratio of nurses to population or health facilities as established by various health "experts." Finally an estimate of qualitative rather than quantitative need is made using the guidelines established by the Surgeon General's Consultant Group on Nursing.

⁶L. T. Mercante found that a reorganization of the administration of nursing units allowed them to use 50% fewer supervising personnel than a comparable hospital ("Organizational Plan for Nursing Service," Nursing Outlook, May, 1962, pp. 305-306).

Part II

INVENTORY OF CURRENT NURSE SUPPLY IN NEBRASKA

Professional Nurse Supply

How many professional nurses has Nebraska? Where are they? What is their age, their preparation, their marital status? Where do they work? What trained but unused potential exists? These are some of the questions to which this section is addressed.

As noted earlier, the answers come from the nurses themselves as they reported these data on their annual re-registration form. This source was supplemented by gathering comparable data from nurses working in Nebraska but registered elsewhere.

There were 7,400 registered professional nurses in the state of Nebraska on 31 December 1966.¹ These included 4,957 (67.0%)

Table 1

DISTRIBUTION OF PROFESSIONAL NURSES IN NEBRASKA
BY SEX AND EMPLOYMENT STATUS, 1957 AND 1966

<u>Registered Nurses</u>	1957	1966			
	<u>Total*</u>	<u>Total</u>	<u>Per Cent</u>	<u>Male</u>	<u>Female</u>
<u>Total</u>	<u>5,726</u>	<u>7,400</u>	<u>99.9</u>	<u>49</u>	<u>7,351</u>
Employed	3,662	4,957	67.0	46	4,911
Unemployed	2,064	2,436	32.9	3	2,433
Employed in another field**	-	7	***	-	7

*Does not include nurses registered in another state but working in Nebraska. Computed from Table 1, Directory of Registered Nurses with Active License for 1957, Nebraska State Board of Nurse Examiners.

**These are dropped from all further analyses.

***Less than 1.0%.

¹Thirty-nine nurses live out of Nebraska, mostly in Council Bluffs, but are registered and work in Nebraska. Seventy-eight work in Nebraska, are registered out of state. Both groups will be treated as part of the total professional nurse population

employed,² 2,436 (32.9%) not employed, and 7 nurses who maintained their registration but worked in another field. (Table 1) These figures approximate the national figures. In 1962 the American Nurses' Association reported that 2/3 of registered nurses were working, 1/3 were unemployed.³

Table 2 shows the geographic distribution of both professional nurses and licensed practical nurses. Compared to a count made in 1957,⁴ 70 counties show an increase in total number of professional nurses⁵ although in most cases the increase is quite nominal. The exceptions, as would be expected, are the counties with urban centers.⁶ Nine counties show no change in number of professional nurses, and 14 counties show a decrease. The distribution of nurses is, quite plainly, like that of the population of the state itself.

²At least 1,296 of these nurses (26.1% of the total of employed nurses) work part time in hospitals--See Table 12. In addition, 5 work part time in schools of nursing, 46 of those in private duty report that they work only part time, 14 school nurses are part time, 31 work in offices or industry part time and 3 list themselves as part time anesthetists. Since the category for part time is included under "field of employment" it is not known how many nurses failed to check this category.

³American Nurses' Association, The Nation's Nurses, The 1962 Inventory of Professional Registered Nurses, 1965, p. 6.

⁴State of Nebraska, State Board of Nursing, Inventory of Registered Nurses with Active License for 1957.

⁵Practical nurses were not licensed at the time of the 1957 survey.

⁶It should be remembered that the figures for the two periods are not exactly comparable, as the 1966 table includes 78 nurses not registered in Nebraska.

Table 2
GEOGRAPHIC DISTRIBUTION OF NURSES IN NEBRASKA BY COUNTY OF RESIDENCE AND FIELD OF EMPLOYMENT, 1957, 1966

Place of Residence	Totals		Field of Employment, Registered Nurses, 1966									
	LPN 1966	RN 1957* 1966	Unem- ployed	Hos- pital	School of Nursing	Pri- vate Duty	Public Health	School Nurse	Indus- trial	Office	Other	
Total	1,300	6,117	7,393	3,699	241	268	85	135	65	452	12	
Adams	24	209	230	118	15	11	1	4	-	25	1	
Antelope	5	31	35	25	-	1	-	-	-	1	-	
Arthur	-	-	3	2	-	-	-	-	-	-	-	
Banner	-	2	2	1	-	-	-	-	-	-	-	
Blaine	-	-	2	-	-	-	-	1	-	-	-	
Boone	1	19	29	15	-	-	-	2	-	1	-	
Box Butte	36	63	63	21	3	10	-	1	-	3	-	
Boyd	-	7	9	1	-	1	1	-	-	2	1	
Brown	6	9	9	5	-	-	-	-	-	-	-	
Buffalo	53	70	92	32	6	9	-	2	-	6	-	
Burt	2	33	30	13	-	-	-	1	-	2	-	
Butler	4	23	25	8	-	-	-	-	-	2	-	
Cass	11	39	53	23	3	2	-	-	-	6	-	
Cedar	-	9	14	5	-	-	-	1	-	1	-	
Chase	2	15	20	10	-	1	-	-	-	-	-	
Cherry	7	24	24	5	-	3	1	-	-	-	-	
Cheyenne	14	47	53	21	1	5	1	-	1	7	-	
Clay	-	32	31	7	1	4	-	2	-	2	-	
Colfax	5	33	41	20	-	1	-	1	1	1	1	
Cuming	10	52	57	24	-	3	-	-	-	7	-	
Custer	8	34	38	19	-	4	-	1	-	2	-	
Dakota	9	6	16	3	1	-	-	-	-	-	-	
Dawes	13	24	32	17	-	5	-	1	-	2	-	
Dawson	18	63	68	32	-	2	-	2	-	5	-	
Deuel	-	8	7	2	-	-	-	-	-	1	-	
Dixon	-	17	17	8	-	-	-	-	-	3	-	
Dodge	16	99	134	56	-	9	-	5	3	11	-	
Douglas	463	2,304	2,747	1,409	123	89	49	45	34	134	2	
Dundy	8	6	9	4	-	-	-	-	-	-	-	
Fillmore	2	26	21	9	-	-	-	2	-	-	-	
Franklin	3	19	12	6	-	-	-	-	-	-	-	

Place of Residence	Totals			Field of Employment, Registered Nurses, 1966									
	LPN 1966	RN 1957*	RN 1966	Unem- ployed	Hos- pital	School of Nursing	Pri- vate Duty	Public Health	School Nurse	Indus- trial	Office	Other	
Frontier	1	5	5	4	1	-	-	-	-	-	-	-	-
Furnas	2	11	10	4	5	-	-	1	-	-	-	-	-
Gage	16	95	98	40	46	-	-	1	2	-	9	-	-
Garden	2	23	16	1	10	-	1	-	-	-	4	-	-
Garfield	-	3	6	2	4	-	-	-	-	-	-	-	-
Gosper	-	5	4	1	2	-	-	-	-	-	-	1	-
Grant	2	3	4	3	1	-	-	-	-	-	-	-	-
Greeley	3	12	20	8	10	-	-	-	-	-	2	-	-
Hall	45	214	259	73	44	10	10	2	3	4	13	-	-
Hamilton	10	29	33	16	12	-	3	-	-	-	2	-	-
Harlan	2	14	18	6	9	-	1	-	-	-	2	-	-
Hayes	-	3	6	3	3	-	-	-	-	-	-	-	-
Hitchcock	2	6	8	2	5	-	1	-	-	-	-	-	-
Holt	3	38	39	15	19	-	3	-	-	-	2	-	-
Hooker	-	2	4	2	1	-	-	-	-	-	1	-	-
Howard	2	24	26	11	13	-	2	-	-	-	-	-	-
Jefferson	1	25	36	11	24	1	-	-	-	-	-	-	-
Johnson	-	16	20	10	9	-	-	-	1	-	-	-	-
Kearney	11	21	20	9	9	-	1	-	-	-	1	-	-
Keith	12	29	35	9	22	-	2	-	-	-	2	-	-
Keya Paha	1	2	3	1	1	-	1	-	-	-	-	-	-
Kimball	4	16	14	4	8	-	-	-	2	-	-	-	-
Knox	8	17	31	10	17	-	1	1	-	-	2	-	-
Lancaster	136	1,008	1,134	329	574	53	41	9	25	15	86	2	-
Lincoln	36	105	108	43	49	-	6	1	2	-	7	-	-
Logan	1	2	3	3	-	-	-	-	-	-	-	-	-
Loup	-	-	1	-	1	-	-	-	-	-	-	-	-
Madison	12	93	110	39	62	-	2	-	2	-	5	-	-
McPherson	1	1	1	1	-	-	-	-	-	-	-	-	-
Merrick	3	19	23	10	11	1	-	-	-	-	1	-	-
Morrill	5	15	19	8	6	1	2	-	-	-	2	-	-
Nance	3	14	15	6	9	-	-	-	-	-	-	-	-
Nemaha	5	11	19	11	5	1	-	-	1	-	1	-	-
Nuckolls	8	20	25	12	9	-	-	-	-	-	3	1	-

Place of Residence	Totals		Field of Employment, Registered Nurses, 1966									
	LPN 1966	RN 1957*	RN 1966	Unem- ployed	Hos- pital	School of Nursing	Pri- vate Duty	Public Health	School Nurse	Indus- trial	Office	Other
Otoe	15	59	63	24	29	-	2	-	3	-	5	-
Pawnee	-	7	11	4	6	-	-	-	-	-	1	-
Perkins	7	7	14	3	9	-	-	-	-	-	2	-
Phelps	13	52	57	15	30	-	3	-	1	-	7	1
Pierce	-	14	21	10	11	-	-	-	-	-	-	-
Platte	15	88	122	48	61	1	3	-	1	-	8	-
Polk	3	26	35	12	20	-	-	-	-	-	3	-
Red Willow	10	49	51	14	28	-	3	2	1	-	3	-
Richardson	9	24	38	14	20	-	-	-	2	-	2	-
Rock	-	4	7	3	4	-	-	-	-	-	-	-
Saline	10	46	47	14	23	1	1	1	2	-	5	-
Sarpy	45	50	212	68	114	7	4	7	6	5	1	-
Saunders	4	39	56	18	29	-	2	1	1	-	5	-
Scotts Bluff	37	166	170	55	80	6	4	3	4	1	15	2
Seward	9	50	54	18	30	-	1	-	2	-	3	-
Sheridan	4	25	28	12	14	-	-	1	-	-	1	-
Sherman	1	12	17	6	8	1	1	-	-	-	1	-
Sioux	1	6	6	2	4	-	-	-	-	-	-	-
Stanton	1	10	9	6	2	-	-	-	-	-	1	-
Thayer	1	20	24	7	15	-	-	-	-	-	2	-
Thomas	1	3	4	3	1	-	-	-	-	-	-	-
Thurston	5	14	12	2	9	-	-	1	-	-	-	-
Valley	5	13	18	9	7	-	1	-	-	-	1	-
Washington	6	42	57	20	29	2	1	-	2	-	3	-
Wayne	-	25	24	8	12	1	-	-	-	-	3	-
Webster	3	18	17	5	9	-	-	-	-	-	3	-
Wheeler	-	1	1	-	1	-	-	-	-	-	-	-
York	9	55	62	28	29	-	1	-	1	-	3	-
Out of State	16	-	39	-	29	1	2	1	-	1	5	-
Unknown	13	-	21	4	14	1	2	-	-	-	-	-

*Source: State of Nebraska, State Board of Nursing, Inventory of Registered Nurses with Active License for 1957, Table 9.

If nurses in Nebraska in 1957 are compared with those in 1966 by field of employment a notable change is a decrease by almost 50% of private duty nurses, from 10.5% of employed nurses in 1957 to 5.4% in 1966. Nationally there was a decrease of private duty nurses of from 22% of employed nurses in 1949 to 12% in 1962.⁷ Those in schools of nursing have increased considerably even when the difference in classification is taken into account.⁸ School nurses have also increased, but there has been a decrease in public health nurses. None of the other changes appear significant in view of the overall increase in nurses.

Table 3

COMPARISON OF NURSES IN NEBRASKA BY FIELD
OF EMPLOYMENT 1957 AND 1966

	<u>1957*</u>	<u>1966</u>
<u>Total</u>	<u>6,182</u>	<u>7,393</u>
Hospital, Other Institution	2,940	3,699
School of Nursing	98	241
Hospital and School of Nursing	39	**
Public Health	94	85
School Nurse	75	135
Private Duty	434	268
Industrial	57	65
Office Nurse	357	452
Other	24	12
Unemployed	2,064	2,436

*Source: State Board of Nursing, Inventory for 1957, Table 2.

**This category not included for 1966 data.

⁷The Nation's Nurses, p. 9.

⁸In 1957 the two categories "School of Nursing" and "Hospital School of Nursing" probably are combined in the 1966 "School of Nursing."

Table 4 compares the distribution of employed nurses by field of practice for Nebraska and the total United States.

Table 4

DISTRIBUTION OF EMPLOYED REGISTERED NURSES BY FIELDS OF
NURSING IN NEBRASKA AND IN THE UNITED STATES

<u>Fields of Nursing</u>	<u>Nebraska 1966</u>		<u>United States, 1962*</u> <u>including Hawaii</u> <u>and Alaska</u>	
	<u>Number</u>	<u>Per Cent</u>	<u>Number</u>	<u>Per Cent</u>
<u>Total</u>	<u>4,957</u>	<u>99.9</u>	<u>532,118</u>	<u>100.0</u>
Hospital, Other In- stitution	3,699	74.6	335,404	63.0
School of Nursing	241	4.9	16,294	3.1
Public Health	85	1.7	23,983	4.5
School Nurse	135	2.7	16,704	3.1
Private Duty	268	5.4	64,155	12.1
Industrial	65	1.3	17,569	3.3
Office	452	9.1	43,558	8.2
Other	12	0.2	14,451	2.7

*Source: The Nation's Nurses, Table 7A, p. 29.

Part III

DEMOGRAPHIC AND EDUCATIONAL CHARACTERISTICS
OF THE NURSE SUPPLY

Registered Professional Nurses

One of the major concerns identified in the 1951 report had to do with levels of preparation of professional nurses. Table 5 summarizes the educational preparation of the nurses of Nebraska by field of employment. Only 63, or 0.8% of Nebraska's nurses have a master's degree in nursing and 10 (15.9%) of these are not working! Another 46 (0.6%) have a master's degree in another field, but 5 (11.0%) of these do not work. In all, 1.9% of Nebraska's employed nurses have a master's degree. These are about evenly divided between hospitals and schools of nursing.

Twelve and two-tenths per cent of Nebraska's working nurses are prepared at the baccalaureate level. Thirty-three and two-tenths per cent of nurses with baccalaureate degrees do not work. The number prepared above the master's level is too small to require comment.

In all, 1,017 (13.8%) of Nebraska's nurses are prepared beyond the diploma.¹ Of these 38.6% work in a hospital or other institution, 16.8% work in a school of nursing, 2.0% do private duty, 3.5% are in public health, 4.5% are school nurses, 0.7% work in industrial jobs, 2.8% work in an office, and 31.0% are unemployed.

Viewed from another perspective those having a baccalaureate or higher degree comprise 12.9% of the unemployed, 10.6% of hospital nurses, 71.0% of those in schools of nursing, 7.5% of private duty nurses, 42.4% of public health nurses, 34.1% of school nurses, 10.3% of industrial nurses, and 6.2% of office nurses.

¹Those reporting associate arts degrees are classified with diploma holders.

Table 5
REGISTERED NURSES, EDUCATIONAL PREPARATION BY FIELD OF EMPLOYMENT, 1966

	Total	Diploma	Associate*	Baccalaureate	Master's		Doctorate	
					Nursing	Other	Nursing	Other
Total	7,393	6,257	119	905	63	46	2	1
% of Total	99.8	84.6	1.6	12.2	.8	.6	**	**
Unemployed	2,436	2,083	38	300	10	5	-	-
Hospital, Other Institution	3,699	3,237	69	348	25	19	1	-
School of Nursing	241	70	-	129	26	15	-	1
Private Duty	268	242	6	19	-	-	1	-
Public Health	85	46	3	31	1	4	-	-
School Nurse	135	89	-	44	-	2	-	-
Industrial	65	58	-	6	-	1	-	-
Office	452	421	3	27	1	-	-	-
Other	12	11	-	1	-	-	-	-

*This is thought to be a considerable overestimation. After this table, the associate degree has been combined with the diploma category.

**Less than 0.1%.

For Table 6 all nurses who reported associate degrees were combined with diploma graduates, and all master's degrees and the three reported doctorates were combined. Classified thus, it is apparent that most of the nurses (61.8%) with baccalaureate degrees are ages 20-39. The majority of those with master's preparation (49.1%) are from ages 30-49, reflecting the longer educational investment.² It is also interesting to note that while 7 of those with master's training in ages 30-39 are unemployed (presumably engaged at this period of their life cycle in family building) only 1 each for the age categories 40-49 and 50-59 are unemployed.³

Table 6 also confirms that the largest proportion of unemployed nurses are in the age range of 30-39 closely followed by those 40-49 and 20-29. During the peak productive years that a man devotes to his job, large numbers of female nurses are removed from the labor market --32.1% of professional nurses between ages 20 and 49 are not employed in nursing. While this is probably functional from the point of view of the individual nurse, it is not difficult to see its dysfunction for the profession as a whole. If 32.9% of Nebraska nurses do not practice their profession, 100 nurses must be educated to keep 67 active in the profession. Such a large proportion of "loss" is difficult to sustain without considerable strain on educational facilities.

²If the 10 years from 50-59 are added, 69.6% of the nurses are in this range.

³An interesting question arises. Is there greater likelihood that those with more educational investment, i.e., a master's degree, are more likely to return to the profession when family commitments allow? These data would seem to indicate that they do.

Table 6

REGISTERED NURSES BY FIELD OF EMPLOYMENT, AGE AND EDUCATIONAL PREPARATION, 1966

	20-29			30-39			40-49			50-59			60-65			66+			Unknown			
	Total	Dip.	BS ²	MS ³	Dip.	BS	MS	Dip.	BS	MS	Dip	BS	MS	Dip	BS	MS	Dip	BS	MS	Dip	BS	MS
Total	7,393	1,691	268	5	1,553	291	27	1,278	188	28	907	82	23	360	30	10	339	18	9	248	28	10
Unemployed	2,436	382	60	-	644	136	7	426	57	1	278	22	1	120	6	-	183	12	6	88	7	-
Hospital, Other Institution	3,699	1,135	126	3	717	93	11	632	75	13	445	32	9	162	7	7	91	3	1	124	12	1
School of Nursing	241	27	54	2	16	35	7	13	25	10	9	5	12	2	2	2	2	2	1	1	6	8
Private Duty	268	16	6	-	38	5	-	48	5	-	56	1	-	32	1	-	49	1	1	9	-	-
Public Health	85	5	9	-	6	4	1	18	5	3	9	8	1	3	4	-	3	-	-	5	1	-
School Nurse	135	8	3	-	16	8	-	30	13	-	22	14	-	9	5	1	3	-	-	1	1	1
Industrial	65	6	2	-	9	1	-	15	1	1	18	-	-	6	2	-	1	-	-	3	-	-
Office	452	111	8	-	101	8	1	94	7	-	70	-	-	24	3	-	7	-	-	17	1	-
Other	12	1	-	-	6	1	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-

¹Combined diploma and associate arts degree.²Baccalaureate degree.³Master's degree and three doctorates.

Table 7 adds evidence to the total picture which emerges of the handicap under which a profession composed largely of women must operate. Of those female nurses employed 3,379 (68.8%) are married.⁴ Given the role structure supported by the American ideology, this overwhelming majority of those in the profession owe their primary time commitment to their family. For all practical purposes they cannot prepare for professional advancement or accept positions which would require the family to move. In the event of a family crisis, such as illness, it is their role to supply the necessary care, staying away from their job if necessary. Imagine the professional chaos if male doctors, for example, or lawyers had the same extra-professional role obligations as nurses.

An alternative to changing the extra-professional role obligations of women (a solution which hardly seems likely, and perhaps is not even desirable) is the recruitment of men into nursing. This has not proceeded with great rapidity in Nebraska or, indeed, nationwide. In the United States as a whole 1.0% of nurses are men.⁵ In 1951 there were 9 male registered nurses employed in Nebraska; in 1957 there were 13; in 1966, 46. However, 14 of these latter were employed as anesthetists, a specialty somewhat outside the major body of nursing practice. Of the remaining 32, 3 were administrators (See Table 10), one was teaching in a school of nursing, and 24 were employed in hospitals at levels ranging from supervisor to general staff. The position of 3 is not known.

⁴The national average for 1962 was 61%, (Nation's Nurses, p. 25).

⁵Nation's Nurses, p. 10.

Table 7

EMPLOYED REGISTERED NURSES BY FIELD OF EMPLOYMENT, MARITAL STATUS AND SEX, 1966

	Female				Male				
	Total	Married	Single	Other	Unknown	Total	Married	Single	Other
Total	4,911	3,379	1,048	456	28	46	34	10	2
Hospital, Other Institution	3,654	2,536	791	307	20	45	34	10	1
School of Nursing	240	146	79	15	-	1	-	-	1
Private Duty	268	174	51	42	1	-	-	-	-
Public Health	85	46	28	11	-	-	-	-	-
School Nurse	135	94	18	22	1	-	-	-	-
Industrial	65	37	14	13	1	-	-	-	-
Office	452	337	66	44	5	-	-	-	-
Other	12	9	1	2	-	-	-	-	-

Licensed Practical Nurses

Nebraska had 1,300 licensed practical nurses on 31 January 1966. Of these 1,045 (80.4%) were employed, 233 (17.9%) were unemployed, and 22 did not report their activity status.

Table 8

DISTRIBUTION OF LICENSED PRACTICAL NURSES IN NEBRASKA BY SEX AND EMPLOYMENT STATUS, 1966

<u>Licensed Practical Nurses</u>	<u>Total</u>		<u>Male</u>	<u>Female</u>
	<u>Number</u>	<u>Per Cent</u>		
<u>Total</u>	<u>1,300</u>	<u>100.0</u>	<u>15</u>	<u>1,285</u>
Employed	1,045	80.4	13	1,032
Unemployed	233	17.9	1	232
Activity status not reported	22	1.7	1	21

Part IV

DEMOGRAPHIC CHARACTERISTICS OF NURSES EMPLOYED
IN HOSPITALS OR OTHER INSTITUTIONS

Registered Professional Nurses

In Nebraska in 1966, 74.6% of the nurses actively engaged in nursing were employed by hospitals or other institutions.¹ This analysis will deal only with these nurses. Hospital nurses can be differentiated on a number of dimensions. One of the most salient is by type of position. Table 9 shows type of position by age and educational preparation.

One-third (34.2%) of the nurses working in hospitals are between the ages of 20-29. This young work force is concentrated in the general duty position--44.7% of general duty nurses are in this age group. This is a not unexpected finding. Of head nurses or assistant head nurses, 23.7% are also in the 20-29 age group. For supervisors, however, experience weighs more heavily. Almost half of the supervisors (48.5%) are between the ages of 30-49.

Only 2 supervisors in hospitals in Nebraska report that they have a master's degree; however, 18 of the administrators hold a master's. Of those who hold baccalaureate degrees 50.3% are working at the staff nurse level; 14.4% as head nurse or assistant.

Table 10 shows the distribution of professional nurses employed in hospitals and other institutions by sex and marital status. Little can be added to the previous discussion of the general distribution of nurses on these variables.

¹63.0% of the nation's nurses worked in hospitals or other institutions in 1962. (The Nation's Nurses, p. 29.)

Table 9

HOSPITAL EMPLOYED REGISTERED NURSES BY TYPE OF POSITION, AGE AND EDUCATIONAL PREPARATION, 1966

	20-29		30-39		40-49		50-59		60-65		66+		Unknown								
	Dip.	BS ¹	Dip	BS MS ³	Dip	BS MS	Dip	BS MS	Dip	BS MS	Dip	BS MS	Dip	BS MS							
Total	3,699	1,135	3	717	93	11	632	75	13	445	32	9	162	7	7	91	3	1	124	12	1
Administrator or Assistant	150	4	2	13	4	1	31	9	7	34	6	5	15	1	4	6	2	1	4	1	-
Consultant	9	-	-	1	-	1	2	-	1	3	-	-	-	-	1	-	-	-	-	-	-
Supervisor or Assistant	464	52	7	89	23	1	97	15	-	95	10	-	31	3	1	18	-	-	22	-	-
Instructor	52	4	7	6	6	5	6	3	3	4	3	-	1	1	-	-	-	-	-	1	1
Head Nurse or Assistant	553	116	15	83	15	1	113	14	1	111	2	1	43	2	1	13	-	-	20	2	-
General Staff or General Duty	2,316	942	92	488	37	2	349	30	1	176	9	2	62	-	-	44	-	-	74	7	-
Unknown	52	8	1	10	1	-	12	-	-	8	1	1	2	-	-	4	1	-	2	1	-
Anesthesia	103	9	2	28	7	-	22	4	-	14	1	-	8	-	-	6	-	-	2	-	-

¹Combined diploma and associate arts degree.

²Baccalaureate degree.

³Master's degree and three doctorates.

Table 10

HOSPITAL EMPLOYED REGISTERED NURSES, BY TYPE OF POSITION, SEX AND MARITAL STATUS, 1966

	Female			Male		
	<u>Total</u>	<u>Married</u>	<u>Single</u>	<u>Other</u>	<u>Unknown</u>	<u>Total</u>
<u>Total</u>	3,654	2,536	791	307	20	45
						34
						10
						1
Administrator or Assistant	147	81	46	18	2	3
						2
						1
Consultant	9	6	3	-	-	-
Supervisor or Assistant	457	279	107	68	3	7
						6
						1
Instructor	51	29	15	6	1	1
						1
						-
Head Nurse or Assistant	549	375	105	68	1	4
						4
						-
General Staff	2,303	1,697	466	128	12	13
						8
						4
Anesthetist	89	38	37	14	-	14
						11
						3
Other	49	31	12	5	1	3
						2
						1
						-

Table 11 reports the distribution of hospital nurses by self-reported areas of clinical practice. Less confidence is placed in these reports than any other classification variable. In the first place, the categories are ambiguous and not mutually exclusive. No instructions are given to establish a common frame of reference for the respondents.² In the second place, in the small hospital³ there is no "area of clinical practice" and in most cases the nurse probably simply listed general or put the category in which most patients would fall. This is not an "area of clinical practice" in the generally accepted use of that term. The amount of variance thus introduced is unknown. However, the findings are presented with this cautionary statement.

Tables 12, 13, and 14 show the report on nursing personnel from the 130 hospitals licensed to operate in Nebraska in 1966 and 3 federal hospitals.⁴ These data indicate that a large proportion (40.2%) of the registered nurses employed by hospitals in Nebraska work part time.⁵ This is true also of practical nurses (17.7% work part time) and aides (24.1% work part time). These proportions vary by size of hospital, type of institution and type of ownership of hospital. Small hospitals are particularly dependent on part time nurses.

The Surgeon General's Consultant Group on Nursing⁶ cites a study which demonstrated that for patient satisfaction 50% of direct patient care should be provided by professional nurses, 30% by licensed practical nurses, and 20% by nursing aides. Although the number of persons in each category does not indicate that they are giving proportionate amounts of care, it is interesting to compare the proportion of levels of nursing in Nebraska with this standard. In December 1965, 32.8% of the nursing personnel were registered nurses, 8.2% practical nurses, and 59.0% nurses aides.⁷

Student nurses are a part of the nurse labor force. They are, however, a significant part only in large hospitals.

²For example, when does one check "Mental Health" and when "Psychiatry?" Does this reflect a treatment philosophy on the part of the individual nurse?

³Eighteen Nebraska hospitals have fewer than 20 beds, 41 between 20 and 29.

⁴One federal hospital did not return the questionnaire.

⁵Part time nurses were estimated to comprise 23% of the employed registered nurses in the United States in 1964. (Michigan League for Nursing, Nursing Needs and Resources in Michigan Today and Tomorrow, 1966, p. 53).

⁶U. S. Surgeon General's Consultant Group on Nursing, For Quality in Nursing, 1963.

⁷Two part time employees computed as one full time.

Table 11

AREA OF CLINICAL PRACTICE OF HOSPITAL EMPLOYED REGISTERED NURSES BY AGE, 1966.

	Total	Age					
		20-29	30-39	40-49	50-59	60-65	66+ Unknown
<u>Total</u>	<u>3,699</u>	<u>1,264</u>	<u>821</u>	<u>720</u>	<u>486</u>	<u>176</u>	<u>137</u>
Medical	181	64	38	37	20	8	11
Surgical	428	189	97	65	49	11	14
Medical-Surgical	864	411	167	119	92	33	26
Pediatric	211	114	37	23	18	4	10
Obstetric	419	163	100	82	31	13	16
Maternal-Child	21	7	3	6	3	2	-
Gynecological	415	50	93	104	83	39	20
Psychiatric	195	66	42	45	29	7	5
Mental Health	10	-	3	1	4	2	-
General Practice	928	198	234	234	152	54	32
Other	2	-	-	1	-	-	1
Unknown	25	2	7	3	5	3	2

Table 12

SIZE OF HOSPITAL BY NURSING PERSONNEL EMPLOYED, DECEMBER 1965*

Beds	Total	R.N.'s			L.P.N.'s			Nurses Aides**		
		Full Time	Part Time	Per Cent Part Time	Full Time	Part Time	Per Cent Part Time	Full Time	Part Time	Per Cent Part Time
Total (N=133)	9,188	1,923	1,296	40.3	582	125	17.7	3,991	1,271	24.2
% of Total	99.9	20.9	14.1		6.3	1.4		43.4	13.8	
0-20 (N=23)		44	64	59.2	13	10	43.5	108	113	51.1
21-30 (N=31)		79	131	62.4	21	14	40.0	208	217	51.0
31-50 (N=28)		136	174	56.1	46	11	19.3	280	192	40.7
51-75 (N=10)		89	98	52.4	52	6	10.3	170	123	42.0
76-100 (N=8)		122	98	44.5	38	8	17.4	221	114	34.0
101-150 (N=11)		235	118	33.4	69	17	19.8	441	118	21.1
151+ (N=22)***		1,218	613	33.5	343	59	14.7	2,563	394	13.3

*Cf. Appendix C which contains tables summarizing these data for 1966.

**Federal hospitals did not report nurses aides.

***One hospital did not report.

Table 13

TYPE OF INSTITUTION BY NURSING PERSONNEL EMPLOYED, DECEMBER 1965 *

	R.N.'s			L.P.N.'s			Nurses Aides**		
	Full Time	Part Time	Per Cent	Full Time	Part Time	Per Cent	Full Time	Part Time	Per Cent
Total	1,923	1,296		582	125		3,991	1,271	
General (N=94)	1,255	966	43.5	351	79	18.3	1,466	836	36.3
Chronic (N=8)	42	30	41.7	13	3	18.8	194	44	18.5
Mental (N=4)	115	11	8.7	10	-	-	1,150	14	1.2
Tuberculosis (N=1)	4	-	-	2	-	-	31	3	8.8
Mentally Retarded (N=1)	9	1	11.1	1	-	-	380	-	-
General & Mental (N=4)***	295	119	28.7	126	23	15.4	287	101	26.0
General & Chronic (N=21)	203	169	45.4	79	20	20.2	483	273	36.1

*Cf. Appendix C which contains tables summarizing these data for 1966.

**Federal Hospitals did not report nurses aides.

***One hospital did not report.

Table 14

TYPE OF OWNERSHIP OF HOSPITAL BY NURSING PERSONNEL EMPLOYED, DECEMBER 1965 *

	R.N.'s			L.P.N.'s			Nurses Aides**		
	Full Time	Part Time	Per Cent Part Time	Full Time	Part Time	Per Cent Part Time	Full Time	Part Time	Per Cent Part Time
<u>Total</u>	<u>1,923</u>	<u>1,296</u>		<u>582</u>	<u>125</u>		<u>3,991</u>	<u>1,271</u>	
Proprietary (N=9)	14	37	72.5	8	8	50.0	49	51	51.0
Non-Profit Organization (N=76)	1,350	987	42.2	445	85	16.0	1,774	914	34.0
County (N=23)	132	159	54.6	40	18	31.0	329	233	41.4
State (N=11)	210	45	21.4	47	7	13.0	1,691	23	1.3
City (N=11)	85	62	42.2	23	7	23.3	148	50	25.2
Federal (N=3)***	132	6	4.3	19	-	-	-	-	-

*Cf. Appendix C which contains tables summarizing these data for 1966.

**Federal hospitals did not report nurses aides.

***One hospital did not report.

Professional Nurses Employed in Federal Agencies

A large number of patients are cared for each year in federal government hospitals. Three Veterans Administration hospitals in Nebraska have a combined bed capacity of 936 and one Air Force Hospital has a bed capacity of 125. A separate analysis of these nurses presents some interesting contrasts. Just over one-fourth (27.5%) of the military nurses have at least a baccalaureate degree, and 25.8% of the civilian nurses who work in federal hospitals are prepared at this level, contrasted to 9.4% of the non-federal hospital-employed nurses. (Table 15) It is also interesting to note the difference in the age structure. No military nurse is over 50 years of age, no civilian employee of a federal hospital over 65. It would appear not to strain credulity too far to attribute this to the excellent retirement plan available to federally employed nurses and to postulate that many of the 95 nurses over age 66 working in non-federal hospitals would have retired had they been assured of financial security.

Professional Nurses in Religious Orders

Ninety-six of the nurses employed in Nebraska's hospitals are members of a Catholic order.⁸ Although the numbers are small and 11.4% of these nurses did not report their age, a pattern which is almost the obverse of that observed among federally employed nurses is evident with regard to age. Only 39.6% of the nurses in orders are under the age of 50.⁹ One-third (34.4%) of the nurses in Catholic orders have at least a baccalaureate degree. Nurses in religious orders are also in positions of responsibility: 21.9% are administrators or assistant administrators and 52.1% are supervisors.

Licensed Practical Nurses

Most practical nurses work in hospitals (56.0%), but 9.6% work in nursing homes.¹⁰ The only other fields employing notable numbers of practical nurses are private duty (6.9%) and offices (5.8%). Nebraska has only 15 male practical nurses.

⁸These were classified on the basis of an address which indicated membership in a religious order. It is possible that this sub-analysis contains some religious of other than the Roman Catholic church.

⁹The large number with ages not listed might affect this conclusion.

¹⁰Licensed practical nurses were given the choice of this category on their licensing form. For professional nurses this category was included in "Hospital or other institution."

Table 15

FEDERAL/NON-FEDERAL HOSPITAL EMPLOYMENT OF PROFESSIONAL
NURSES BY AGE AND EDUCATION, 1966

<u>Age and Education</u>	<u>Military</u>	<u>Civilian</u>	<u>Non-Federal</u>
<u>Total</u>	<u>40</u>	<u>240</u>	<u>3,419</u>
20 - 29			
Diploma	16	39	1,080
Degree	1	11	117
30 - 39			
Diploma	7	44	666
Degree	7	13	84
40 - 49			
Diploma	6	71	555
Degree	3	18	67
50 - 59			
Diploma	-	16	429
Degree	-	13	28
60 - 65			
Diploma	-	7	155
Degree	-	1	13
66+			
Diploma	-	-	91
Degree	-	-	4
Unknown			
Diploma	-	1	123
Degree	-	6	7

Table 16
NURSES IN ROMAN CATHOLIC ORDERS BY TYPE OF POSITION, AGE AND EDUCATION, 1966

	Total		20-29		30-39		40-49		50-59		60-65		66+		Unknown	
	Diploma	Degree	Dip.	Deg.	Dip.	Deg.	Dip.	Deg.	Dip.	Deg.	Dip.	Deg.	Dip.	Deg.	Dip.	Deg.
Total	63	33	3	3	7	8	9	8	14	7	9	4	11	2	10	1
Administrator or Assistant	7	14	-	-	-	2	-	6	2	3	3	1	1	2	1	-
Consultant	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Supervisor or Assistant	34	16	1	2	4	6	4	2	8	4	6	2	6	-	5	-
Instructor	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Head Nurse or Assistant	5	-	-	-	1	-	-	-	2	-	-	-	1	-	1	-
General Staff	12	1	2	1	1	-	4	-	1	-	-	-	3	-	1	-
Anesthetist	3	-	-	-	1	-	-	-	1	-	-	-	-	-	1	-
Unknown	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1

Table 17

LICENSED PRACTICAL NURSES BY FIELD OF EMPLOYMENT AND SEX, 1966

	<u>Total</u>	<u>Per Cent</u>	<u>Female</u>	<u>Male</u>
<u>Total</u>	<u>1,300</u>	<u>99.7</u>	<u>1,285</u>	<u>15</u>
Unemployed	233	17.9	232	1
Hospital	728	56.0	723	5
Nursing Home	125	9.6	121	4
Private Duty	90	6.9	88	2
Public Health	8	0.6	7	1
Industrial	3	*	3	-
Office	76	5.8	75	1
Other	15	1.2	15	-
Activity Status Not Reported	22	1.7	21	1

*Less than 0.5%.

Part V

DEMOGRAPHIC CHARACTERISTICS OF UNEMPLOYED NURSES

The unemployed nurse, as Table 18 shows, is most apt to be a married woman between the ages of 30 and 39--32.3% of the unemployed are in this age group. From another perspective, 42.1% of nurses in this age group (i.e., 30-39) are not employed. However, in the age categories 40-49 and 20-29 there are also large numbers of married women who are not working--19.3% of the unemployed are married women 40-49 years of age and 17.2% are married women between 20 and 29. It is only after the commonly accepted retirement age of 65 that those who are single make up a significant proportion of the unemployed.

Table 18

REGISTERED NURSES NOT EMPLOYED, BY
AGE AND MARITAL STATUS, 1966

<u>Age</u>	<u>Total</u>	<u>Married</u>	<u>Single</u>	<u>Other</u>
Total Unemployed	<u>2,436</u>	<u>2,111</u>	<u>137</u>	<u>188</u>
20 - 29	442	419	22	1
30 - 39	787	771	7	9
40 - 49	484	469	4	11
50 - 59	301	253	21	27
60 - 65	126	86	16	24
66+	201	61	63	77
Unknown	95	52	4	39

To what extent can the unemployed nurses realistically be viewed as a potential labor pool for the nurse labor force? Labor force participation by women has been steadily increasing in the United States; nursing has followed this general trend. "In 1940, married women made up less than a third of the female work force; by 1950, their number had reached half, and by 1962, exceeded half of all women workers. The rise has been chiefly due to increased entry by mature women: between 1947 and 1962, the number of women 45 and older who were working doubled."¹ According to the Women's Bureau, "During the 1950-61 period, the number of women in part-time jobs has increased much more rapidly than the number in full-time work. . ."²

Nursing might suffer some handicap in attracting its married practitioners back into the labor force, however. The U. S. Department of Labor found the most important reason given by married women for returning to work was financial necessity. Thirty-one and three-tenths per cent of those with one year of college or more gave this reason.³ An additional 20.4% gave reasons also related to economic necessity, e.g., earning extra money or husband unemployed. Only 21.8% said that they worked because of the personal satisfaction they derived from their jobs. Given the present wage scale for nurses, the financial gain realized by a married nurse offers little incentive to return to work. This is especially true if the nurse has children young enough to require the services of a baby-sitter.

¹Report of the President's Commission on the Status of Women, American Women, 1963, p. 66.

²U. S. Department of Labor, Women's Bureau, 1962 Handbook on Women Workers, Bulletin 285, p. 58.

³U. S. Department of Labor, Why Women Start and Stop Working: A Study in Mobility, Special Labor Force Report No. 59, Table 1.

Part VI

NURSING NEEDS

The difficulties of estimating nursing needs have already been pointed out. This report will, however, make some tentative estimates of present nurse deficit to serve as a basis for projecting nursing needs by those interested nurses and citizens whose responsibility it is to provide health services for the people of Nebraska.

Ratio of Nurses to the Population

For the United States as a whole there were 298 employed nurses per 100,000 people in 1962.¹ The same report listed the ratio in Nebraska as 320/100,000 population. Twenty-two states exceeded this ratio, i.e., had a ratio of more than 320/100,000 population. By 1964 the nurse/population ratio had increased to 306/100,000 for the United States.² For Nebraska, using 1966 figures, it was 337/100,000. The National League for Nursing and United States Public Health Service indicate a desirable ratio of 350 registered nurses per 100,000 population.³

Ratio of Nurses to Hospital Beds

The measure of nurse deficit can be refined somewhat by estimating the deficit of hospital nurses as a ratio of the number of nurses to hospital beds. The Michigan report considered the equivalent of 1 full time registered nurse per 2.9 hospital beds and 1 full time licensed practical nurse per 5.6 hospital beds as a norm. Nebraska in 1966 had a ratio of 1 registered nurse per 2.0 hospital beds and 1 practical nurse per 8.7 hospital beds.⁴

Educational Deficit of Nebraska Nurses

Another method of estimating nursing deficit is by an assessment of the levels of preparation of nurses now practicing compared with the level recommended by national organizations. This type of analysis identifies, not the shortage of nurses, but the shortage of preparation of the nurses now practicing.

¹The Nation's Nurses, p. 7.

²Michigan League for Nursing, op. cit., p. 7.

³Ibid.

⁴Computed from the reports of hospital administrators. Part time nurses were considered as working half time--the national average according to The Nation's Nurses, p. 9. Only general hospitals (and those combining general and some other service) were included.

Nursing Needs and Resources in Michigan quotes the standards used by the Surgeon General's Consultant Group on Nursing in 1962 as follows:⁵

Positions	Preparation
<p>Group A</p> <p>Registered nurses who give direct patient care as general staff nurses in hospitals, clinics and nursing homes where supervision is available; private duty nurses; nurses in doctors' offices.</p>	<p>Hospital Diploma Program or Junior College Associate Degree Program</p>
<p>Group B</p> <p>Registered nurses who give direct patient care requiring specialized clinical competence; staff level public health nurses; directors of nursing in nursing homes that provide skilled nursing care; nurses in hospital positions ranging from team leader through head nurse.</p>	<p>Baccalaureate Degree Program</p>
<p>Group C</p> <p>Faculty in all nursing education programs; clinical specialists, supervisors and consultants in all types of institutions and health agencies; administrators, assistant administrators and inservice education directors in hospitals and health agencies.</p>	<p>Master's Degree Program</p>
<p>Group D</p> <p>Deans of college nursing programs; faculty of graduate education programs; research investigators; nursing service directors of large hospital systems or large public health agency systems.</p>	<p>Doctoral Program</p>

⁵Michigan League for Nursing, op. cit., pp. 26-27.

Using these standards, Nebraska has an educational deficit of 819 nurses prepared at the master's degree or higher and 272 nurses with baccalaureate degrees. In other words, 22.0% of Nebraska's nurses are under-prepared for their position using these standards. The Surgeon General's Consultant Group recommended that the proportion of R.N.'s with baccalaureate or higher preparation be increased from 10% (the 1962 national figure) to 17.7% in 1970. For Nebraska in 1966, 14.1% were prepared at this level.

Table 19

EDUCATIONAL DEFICIT OF EMPLOYED NEBRASKA NURSES, 1966

<u>Educational Preparation</u>	<u>Number of Employed R.N.'s</u>	
	<u>Held the Degree</u>	<u>Needed the Degree*</u>
<u>Total</u>	<u>4,957</u>	<u>4,957</u>
Master's Degree or Higher	97	916
Baccalaureate Degree	604	876
Diploma or Associate Degree	4,256	3,101
Unknown	-	64

*Estimated from field of employment and type of position (self-report) using guidelines of Surgeon General's Consultant Group on Nursing, 1962.

Deficit by Fields

Hospitals⁶

Hospital administrators in Nebraska reported that as of 31 December 1965 they had budgeted and unfilled positions for 168 registered nurses. It is not known how much of this figure is an underestimation for 30 hospital administrators (of 133) failed to fill out this question on their licensing form.⁷ They also reported budgeted and unfilled positions for 61 L.P.N.'s.⁸ Sixty positions were open for nurses aides.

Table 20

BUDGETED AND UNFILLED POSITIONS REPORTED* FOR VARIOUS LEVELS OF
NURSING PERSONNEL BY SIZE OF HOSPITAL, DECEMBER 1965

	Number of Beds							
	Total (N=133)	0-20 (N=23)	21-30 (N=31)	31-50 (N=28)	51-75 (N=10)	76-100 (N=8)	101-150 (N=11)	151+ (N=22)
R.N.'s	<u>168</u>	-	9	1	4	-	2	152
L.P.N.'s	<u>61</u>	-	-	3	-	-	-	58
Nurses Aides	60	-	-	3	-	-	-	57

*Two hospitals indicated needs but made no estimate of how many were needed; 30 hospitals did not report.

⁶Cf. Appendix C which contains tables summarizing these data for 1966.

⁷Four of the hospitals failing to report had 20 or fewer beds, eleven had from 21 to 30 beds, two from 31 to 50 beds, one from 51 to 75 beds, one from 76 to 100, two from 101 to 150, and seven had 151 or more beds. Two reported needs but gave no estimate. One federal hospital did not report.

⁸The same hospitals failed to report their need of L.P.N.'s and of nurses aides.

Most of the hospital administrators reporting that they needed nurses were from hospitals under the administration of non-profit organizations. City and state hospitals also had numerous unfilled positions. It appears that federal hospitals--in spite of their size and therefore relatively large staffs--had little trouble competing for nurses.

Table 21

BUDGETED AND UNFILLED POSITIONS REPORTED* FOR VARIOUS LEVELS OF NURSING BY TYPE OF OWNERSHIP OF HOSPITAL, DECEMBER, 1965

	Total (N=133)	Proprietary (N=9)	Non-Profit Organization (N=76)	County (N=23)	State (N=11)	City (N=11)	Federal (N=3)
R.N.'s	<u>168</u>	-	128	4	14	20	2
L.P.N.'s	<u>61</u>	-	50	3	8	-	-
Nurses Aides	<u>60</u>	-	44	3	13	-	-

*Two hospitals indicated needs but made no estimate of how many were needed; 30 hospitals did not report.

Table 22 shows the nursing personnel needs by type of institution. Not unexpectedly, the general hospitals and combined general-mental hospitals comprise the largest categories with unfilled positions.

Table 22

BUDGETED AND UNFILLED POSITIONS REPORTED* FOR VARIOUS LEVELS OF NURSING BY TYPE OF INSTITUTION, DECEMBER, 1965

	Total (N=133)	General (N=94)	Chronic (N=8)	Mental (N=4)	Tuberculosis (N=1)	Mentally Retarded (N=1)	Gen. & Mental (N=4)	Gen. & Chronic (N=21)
R.N.'s	<u>168</u>	65	1	-	3	-	96	3
L.P.N.'s	<u>61</u>	17	-	-	-	-	44	-
Aides	<u>60</u>	30	-	-	5	-	25	-

*Two hospitals indicated needs but made no estimate of how many were needed; 30 hospitals did not report.

Public Health and School Nurses

The American Public Health Association recommends the equivalent of one full-time public health nurse per 5,000 population. In 1966 Nebraska had one full-time (or equivalent) public health nurse per 17,376 population. As of 1 January 1966 there were only 3 1/2 budgeted but unfilled positions in public health.

Neither Lincoln nor Omaha had unfilled positions for school nurses. It is difficult to estimate how many school districts would use school nurses if they were available. However, it is likely that most school districts which want school nurses have them, since there is no separate certification for school nurses in Nebraska and the hours and vacations make this an attractive position for married nurses.

Private Duty, Office and Industrial Nurses

No attempt to estimate deficit in these areas was made. There is very little consensus on any norm.

Nursing Education

Schools of nursing report a nurse deficit for October 1966 of seven nurses prepared at the master's level for collegiate schools of nursing and six nurses at the master's level for diploma schools. Diploma schools also have budgeted but unfilled positions for five nurse educators with baccalaureate degrees.⁹ Only two diploma schools indicated that they had adequate faculty.

⁹Two diploma schools did not answer the question regarding budgeted and unfilled positions on their questionnaire.

Part VII

SUPPLY--NEBRASKA'S SCHOOLS OF NURSING¹

In 1966 Nebraska had eleven diploma schools preparing registered nurses, three collegiate schools offering a baccalaureate degree in nursing, and four practical nurse schools. All were accredited by the Nebraska State Board of Nursing. As contrasted with 1951 when none were nationally accredited, thirteen of the fourteen schools for professional nurses were accredited by the National League for Nursing. In October 1966 the diploma schools in Nebraska had a student body which ranged in size from 50 to 207 students, with an average of 132.5 students. The three collegiate schools reported 321 students² or an average of 107 students.

Nursing personnel are prepared in Nebraska on a number of levels: untrained, or hospital trained, nursing aides, licensed practical nurses who graduated from accredited one year schools, registered nurses graduated from three year diploma schools, registered nurses graduated from a four year baccalaureate program, and three year diploma school graduates who earn a baccalaureate degree after completing a three year nursing course. There is post-graduate training in anesthesia and psychiatry. There are no programs for an advanced degree in nursing.

The combined educational facilities for nurses in Nebraska graduated 423 diploma students, 52 students with a baccalaureate degree in nursing, and 161 practical nurses in 1966. These nurses, of course, offer the greatest single potential for increasing the nursing labor force. Where do they work? How many of them do not enter the labor force? How important are they as a labor force supply for their parent institution? Table 23 gives some of the answers.

The nursing school is an important labor pool for the parent hospital. It is also interesting that most nurses who finish the program are engaged in nursing practice at least for the immediate period after graduation. A very small proportion go immediately into further educational programs.

¹The data for this section were obtained from a questionnaire returned by directors of all professional schools of nursing in Nebraska. The questionnaire was adapted from E. Cunningham, Today's Diploma Schools of Nursing, National League for Nursing, 16-1081, New York, 1963, pp. 57-64. See original source for questions used.

²Includes those of sophomore level or higher.

Table 23

EMPLOYMENT OF 1965 AND 1966* GRADUATES OF NEBRASKA'S
DIPLOMA SCHOOLS OF NURSING

<u>Employed</u>	<u>Graduates of 1965</u>		<u>Graduates of 1966</u>	
	<u>Number</u>	<u>Per Cent</u>	<u>Number</u>	<u>Per Cent</u>
<u>Total</u>	<u>405</u>	<u>100.0</u>	<u>423</u>	<u>99.9</u>
Parent Hospital	101	24.9	187	44.2
Other General Hospital	141	34.8	142	33.6
Psychiatric Hospital	12	3.0	8	1.9
Nursing Home	2	0.5	2	0.5
Military Service	15	3.7	15	3.5
Physician's Office	23	5.7	5	1.2
Public Health	5	1.2	6	1.4
Teaching	3	0.7	1	0.2
Industrial	1	0.3	1	0.2
Non-nursing Position	-	-	2	0.5
Full Time Study				
Baccalaureate Degree				
Program	8	2.0	9	2.1
Master's Program	3	0.7	2	0.5
Other Study	-	-	1	0.2
Anesthesia	2	0.5	-	-
Part Time Study	6	1.5	6	1.4
Other Employment in Nursing	9	2.2	8	1.9
Neither Employed nor En-				
gaged in Full Time Study	15	3.7	14	3.3
Do Not Know	59	14.6	14	3.3

*Graduates of Diploma Schools only. This information could not be furnished by the collegiate schools.

Characteristics of the Student Nurse Population

Students in the diploma schools are, in the usual case, high school graduates. However, three of the Nebraska schools report 12, 18 and 20 students respectively (or 9.8% of their enrollment) with two years or more of college before admission. The other schools report only a total of 8 students with this much college prior to entering the diploma program. This would indicate adequate counseling to encourage girls with substantial preparation to enter a degree program.

Table 24 shows the geographic origin of students in Nebraska's schools of nursing.

Table 24

GEOGRAPHIC ORIGIN OF NEBRASKA STUDENT NURSES, OCTOBER 1966

	Nebraska Students				All U.S.* Diploma Students 1962
	Diploma Students		Baccalaureate Students		Per Cent
	Number	Per Cent	Number	Per Cent	
<u>Total</u>	<u>1,458</u>	<u>99.9</u>	<u>321</u>	<u>100.0</u>	<u>100</u>
Same County	290	19.9	50	15.6	36
Another County	825	56.6	102	31.8	47
Bordering State	312	21.4	88	27.4	12
Non-bordering State	30	2.0	77	24.0	5
Foreign	1	**	4	1.2	**

*Today's Diploma Schools, Figure 3, p. 9.

**Less than 1%.

In comparing the origin of Nebraska and all United States students, Nebraska "pirates" students from bordering states in considerably higher proportions than the norm. This is no doubt due in large part to the inclusion of Council Bluffs, Iowa, in the metropolitan area of Omaha. This is another instance of the artificiality of political boundaries when analyzing goods and services.

Nursing students in Nebraska in this time period were drawn in equal proportion from small towns, metropolitan areas and rural areas. In the future, however, as Nebraska becomes increasingly more urban, recruitment efforts will have to make special appeal to the graduates of urban high schools. It is already evident that collegiate schools are reflecting this change.

Table 25

RURAL/URBAN ORIGIN OF NEBRASKA STUDENT NURSES, 1966

<u>Origin</u>	<u>Total</u>		<u>Diploma Students</u>		<u>Collegiate Students</u>	
	<u>Number</u>	<u>Per Cent</u>	<u>Number</u>	<u>Per Cent</u>	<u>Number*</u>	<u>Per Cent</u>
<u>Total</u>	<u>1,703</u>	<u>99.9</u>	<u>1,458</u>	<u>99.9</u>	<u>245</u>	<u>100.0</u>
Towns of 10,000+	598	35.0	476	32.6	122	49.8
Towns up to 10,000	585	34.4	490	33.6	95	38.8
Farms	520	30.5	492	33.7	28	11.4

*One school did not separate farms from towns up to 10,000, thus they were omitted from this table.

One of the attributes which has long separated nursing schools from general education has been their insistence on what one person has termed the "monastic" pattern, i.e., student nurses living in residences and remaining unmarried. This has been changing since World War II. Although the number of students who take advantage of a policy which allows them to continue living at home or to marry and live outside the hospital residence is relatively small, such a policy salvages a number of students who otherwise would not continue their nursing education. All but one of Nebraska's schools of nursing allow students to live out. It is interesting to note the difference between the residence patterns of diploma and collegiate school students.

Table 26

RESIDENCE PATTERNS OF STUDENTS IN NEBRASKA'S NURSING SCHOOLS, 1966

	<u>Day Students</u>		<u>Resident Students</u>	
	<u>Number</u>	<u>Per Cent</u>	<u>Number</u>	<u>Per Cent</u>
Diploma Schools*	113	7.8	1,335	92.2
Collegiate Schools	64	19.9	257	80.1

*81.3% of students in diploma schools were resident students in 1962 for all U.S. schools (Today's Diploma Schools).

Only one school in Nebraska does not admit married students. Nevertheless, as Table 27 shows the proportion of married students is low.

Table 27

MARITAL STATUS OF NEBRASKA NURSING STUDENTS, 1966

<u>Marital Status</u>	<u>Diploma Schools</u>		<u>Collegiate Schools</u>	
	<u>Number</u>	<u>Per Cent</u>	<u>Number</u>	<u>Per Cent</u>
<u>Total</u>	<u>1,458</u>	<u>99.6</u>	<u>321</u>	<u>100.0</u>
Single	1,391	95.4	298	92.8
Married	62	4.2	23	7.2
Widowed or Divorced	5	*	-	-

*Less than 1%.

The attrition rate of student nurses has shown little change over the years since it was first computed. In 1950, the rate of withdrawals was 33.0% for the United States; in 1962, it was 33.2%.³ For Nebraska, in the 1966 class it was 30.4%. Compared to an estimated withdrawal rate for liberal arts colleges of 50%, this lower attrition rate reflects the careful screening process through which student nurses are admitted. Nonetheless, the rate of academic failure and failure to adjust has traditionally been of considerable concern to nursing educators. Table 28 reports reasons given for withdrawal for students from Nebraska's schools for the class of 1966.

³Today's Diploma Schools, p. 41.

Table 28

ATTRITION RATES* OF THE CLASS OF 1966 FOR NEBRASKA
NURSING SCHOOLS BY REASON FOR WITHDRAWAL

<u>Reason for Withdrawal</u>	<u>Diploma</u>		<u>Collegiate**</u>	
	<u>With-</u> <u>drawals</u>	<u>Per</u> <u>Cent</u>	<u>With-</u> <u>drawals</u>	<u>Per</u> <u>Cent</u>
<u>Total</u>	<u>160</u>	<u>100.0</u>	<u>68</u>	<u>100.0</u>
Academic Failure				
In general education courses	34	21.2	18	26.5
In nursing courses	4	2.5	1	1.5
In both general education and nursing courses	37	23.1	10	14.7
Non-academic Reasons				
Marriage and/or pregnancy	27	16.9	7	10.3
Dislike of nursing	22	13.8	10	14.7
Other	36	22.5	22	32.3

*Does not include transfers.

**For last 3 years only.

Characteristics of the Faculty

Educational preparation of the faculty is a major criterion for evaluating schools of nursing. Detailed data on the academic preparation of the faculty members of Nebraska schools of nursing is presented in Table 29.

Table 29
CHARACTERISTICS OF FACULTY IN NEBRASKA NURSING SCHOOLS, 1966

	<u>Diploma Schools</u>	<u>Collegiate Schools</u>
Number of Schools	11	3
Number of Students Enrolled	1,458	321
Nurse Faculty		
Number of students per instructor*	10.0	12.1
Academic Preparation of Full-time Nurse Faculty		
Master's degree	6	29
Baccalaureate degree	75	9
No degree	26	-
Academic Preparation of Part-time Nurse Faculty		
Master's degree	2	2
Baccalaureate degree	12	-
No degree	7	-
Academic Preparation of Administrative Level Nurses (Directors and Ass'tants)		
Doctoral degree	-	1
Master's degree	14	4
Baccalaureate degree	6	-
Non-nurse Faculty		
Academic Preparation of Full-time Faculty		
Master's degree	1	-
Baccalaureate degree	9	-
No degree	2	-
Academic Preparation of Part-time Faculty		
Doctoral degree	1	-
Master's degree	4	-
Baccalaureate degree	23	1
No degree	3	-
Academic Preparation of Cooperating Agency Personnel		
Master's degree	8	-
Baccalaureate degree	57	-
No degree	22	-
Academic Preparation of College Faculty		
Doctoral degree	28	11**
Master's degree	38	14**
Baccalaureate degree	11	-
No degree	1	-

*Full-time equivalent.

**Two schools did not report.

Measures of faculty development other than academic preparation can be investigated. For example, all of the schools report that there is a formal faculty organization. Further, eight of the diploma schools report that they conduct annual self-evaluation, one reports a biennial evaluation and only two schools report that self-evaluation is irregular. However, only one school reports that the evaluation includes an outside consultant. The danger here would seem self-evident.

The schools report that they freely solicit the opinions of faculty, hospital administrators, governing boards and students as a form of evaluation. They also rely on standardized achievement tests, reports from cooperating agencies, performance on State Board examinations, and follow-up of previous graduating classes.

Library Facilities

Library facilities are a critical factor in evaluating and accrediting any educational facility. Although nursing school libraries have often been deficient in the past, the picture is changing for most schools. All of Nebraska's diploma schools in 1966 reported either a separate library (9) or a combined medical-nursing library (2).⁴ The number of titles (excluding fiction) reported ranged from 610 to 10,205 with an average of 2,095. This compares with the national median in 1962 of 1,182. New titles added during the previous school year averaged 142 per school compared with the national median of 101. (The range was from 56 to 333.) There was an average of 32 periodicals per school compared to the national median of 20.⁵ Again the range was wide with two schools reporting only ten periodicals and one reporting 174. Most schools did not have a librarian with a degree in library science. Indeed, two schools did not have a full time librarian.

Characteristics of the Schools

The diploma schools all had a 36 month program. The number of weeks of actual class and clinical laboratory assignments ranged from 39 to 48 per year with most schools reporting 48 weeks each of the three years. All of the diploma schools reported that their students had some instructions on a college campus. Four also reported some college courses taught at the nursing school. All reported that their

⁴For collegiate schools the library is considerably larger and frequently combined with the university library. Only diploma schools will be considered in this discussion.

⁵Figures for national median from Today's Diploma Schools, p.24.

students earned some college credits for courses taken during the three years. The average (mode) was the equivalent of one academic year.

With two exceptions, the eleven diploma schools were governed by the hospital board. In four of the eleven schools the director of the school was also the director of nursing service. All reported that the director had no teaching responsibilities for any of the major courses. Since all but one of the directors had a master's degree (they constituted 54.5% of the faculty prepared at this level), the best prepared nurse teachers are not in the classroom. This is, of course, an echo of the often lamented phenomenon of the nurse with advanced preparation not at the bedside. Perhaps nursing education should follow the pattern of many colleges which require administrative personnel through the rank of dean to teach at least one course.

Many of these characteristics do not, of course, apply to baccalaureate schools. Their graduates earn a baccalaureate degree on completion of the program. Their instruction is all on the college level and carries college credit. They are governed by the same rules and regulations and are under the same administration as the other colleges or departments in the university. Table 29 compares the preparation of diploma and collegiate faculty.

Financial Considerations

The cost to the student for the diploma programs does not vary much by school. With the exception of one school which reports the cash cost to the student of the total program as \$1,503.50, the other ten schools report their cost between about \$2,200 and \$3,000. The average is \$2,190. None of the schools pay students during any part of the program.

During the period of reporting, 220 students in diploma programs received loans for tuition and fees, 268 had scholarships, and 59 others received financial help, e.g., grants-in-aid. In all, 405 student nurses or 27.8% of the total received some kind of financial aid. The student nurses' ability to earn money while attending school is probably limited by their relatively small amount of free time. Although specific studies cannot be cited to substantiate the claim, it is likely that student nurses have less time to hold part-time jobs than college students in general. Nevertheless, eight of the schools reported that they allowed their students to work in the hospital giving patient care for pay. An additional school allowed them to work at non-nursing duties. All but one reported that their students were allowed to work outside of the hospital. This latter probably represents a very minor source of income for the student, however.

The cost of a baccalaureate education is considerably more than for a diploma program. Estimates of expense ranged from \$6,900 for the four years to \$2,030 plus meals, books, and uniforms as the cost of the last three years. However, 50.1% of the students in the baccalaureate programs were receiving some form of financial aid. These students were allowed to work outside the hospital, in the hospital in non-nursing duties, and two of the three schools allowed them to receive pay for patient care.

Curriculum

In general in diploma schools the behavioral sciences are being taught to student nurses in classes with other students on college campuses. Biological and physical sciences, though often taught by college faculty, are most frequently for nurses only. Three schools are using educational television for all or part of the biological and physical sciences. The diploma programs used a cooperating agency for psychiatry, and a number had a pediatric affiliation.

The collegiate schools indicated a more extensive offering of courses, e.g., public health and administration and leadership. They did not use cooperating agencies, but taught all areas themselves.

The schools reported considerable planning and changes in the recent past in curriculum organization, utilization of college or university instruction, timing and sequence of the educational program. Two school reported that they were considering changes in the length of the educational program.

Plans and Problems--the Future

More schools reported changes made in the in-service education program for the faculty than in any other area. However changes were reported either in progress or planned in many other areas: school fees, faculty selection and recruitment, student personnel policies, curriculum change, utilization of clinical resources, and library resources were the most frequently cited.

Almost without exception securing faculty "adequate in number and preparation" was identified as the major problem. Faculty development was also cited. Other problems were expansion of physical facilities, need for new physical facilities, cost to the hospital of maintaining a school of nursing, financial difficulties in general, adequate clinical facilities and the problem which arises when the students face what has been called the "reality shock" of finding out that the quality of nursing care taught is not matched by that practiced. One school identified recruiting an adequate number of capable

students as a major problem.

In all, the impression was conveyed that the directors of Nebraska schools of nursing perceive a major problem in the area of adequately prepared faculty. There is considerably less consensus concerning the next most pressing problem, but if matters which have to do with finance, (e.g., expansion and new facilities, cost of operation, etc.) are combined, these would clearly rank second.

Conclusions

This report is viewed as an analogue of the laboratory reports presented the physician. Laboratory reports offer some insight into internal physical processes and present data points on which, using his professional judgment and knowledge of the "whole" patient, the physician can make a diagnosis and prescribe a treatment regime. This report has as its goal the compilation of data which would inform on the state of nursing in Nebraska for 1966. It is expected to serve as data points on the basis of which interested professional and community members can make decisions and advocate policy about the direction of nursing and nursing education for Nebraska. The data are contained in the tables.

However, a technician often describes the gross morphology of a field. Therefore a few observations seem warranted: Nebraska needs more professional and practical nurses to come up to present standards, however those standards are determined. This need is particularly acute in several areas: nurses trained at the baccalaureate and advanced levels; public health nurses; male nurses; nurse educators. Rigorous inquiry into the feasibility of re-designing the educational program so that it will hold more appeal for prospective nurses who are at present presented attractive career possibilities in many other fields would appear to be of first importance. Increasing financial aid to students should be investigated. It has been demonstrated that larger schools educate nurses more effectively and at less cost.⁶ This should be kept in mind as plans are made. Finally, as nurses do not need to be reminded but perhaps the general public does, salaries for nurses must be raised to the level so that nursing can successfully compete with other service professions of a similar educational level--social work, teaching, etc.

If this report has presented the picture of nursing in Nebraska in 1966 unambiguously so that it can serve as a basis for policy-making regarding the future direction of nursing in Nebraska, it will have served its purpose nobly. For the health standard which is the right of every American cannot be assured without the personnel to implement the technology which is available. And nurses occupy a key position in the health field.

⁶Today's Diploma Schools of Nursing, pp. 5,6.

Appendixes

Appendix A

Questions used for Registered Nurse inventory from Application for Renewal of License:

1966 Application Information

Important: Please circle number _____ Social Security Number _____
 Present Field of Employment: 1. Hosp.-other institution; 2. Sch. of Nurs;
 3. Private Duty; 4. Public Health; 5. Sch. Nurse; 6. Industrial;
 7. Office (doctor, dentist); 8. Other (specify) _____
 Type of position: 1. Adm. or Asst; 2. Consultant; 3. Supv. or Asst;
 4. Instructor; 5. Hd. Nurse or Asst; 6 General duty or Staff; 7. Other
 (specify) _____
 Employed by Federal Government Service 1. Yes 2. No. If yes, 1. Mil-
 itary (other than reserve) 2. Civilian.
 Educational preparation Basic: 1. Diploma 2. Associate 3. Baccalaureate
 or higher degree
 Highest degree held: 4. Baccalaureate 5. Master's in nursing
 6. Master's in other field 7. Doctorate in nursing 8. Doctorate in
 other field 9. No degree.
 If you hold a college degree was psychiatric nursing your area of
 clinical specialization?
 1. Yes 2. No
 Present area of clinical practice: 1. Medical 2. Surgical 3. Medical-
 surgical 4. Pediatric 5. Obstetric 6. Maternal-child health 7. Gyneco-
 logic 8. Psychiatric 9. Mental health 0. General practice
 Y. Other (specify) _____
 Personal: Marital status S M W D Sep. Sex M F Date of Birth _____
 Are you actively employed in nursing: Yes No Employed in the State of _____
 Other states in which currently registered _____
 If in Nebraska, in what county do you reside? _____

Questions used for Licensed Practical Nurse inventory from
Application for Renewal of License:

Enclosed is \$2.00 in check____, money order____, currency____ (at my own risk) for my 1966 license to practice as a licensed practical nurse in Nebraska.

Important: Please circle number Social Security Number: _____

Field of employment: (1) Hosp.; (2) Nursing Home; (3) Private Duty;

(4) Public Health; (5) Industrial; (6) Office (doctor or dentist);

(7) Other (Specify)_____

Type of position: Specify_____

Personal: Circle or complete:

Marital status S M W D Sep. M F. Date of Birth_____

Are you actively employed in nursing? Yes No. Employed in the State of _____

If unemployed give year of last employment_____ Other states in which currently licensed_____

If in Nebraska, in what county do you reside?_____

Appendix B

Information on part time and full time employment of hospital nursing personnel from hospital license renewal form:

2. Complete the following information pertaining to your personnel:
(Exclude students from this listing.)

<u>Category of Personnel</u>	<u>Number Employed Full Time</u>	<u>Number Employed Part Time</u>	<u>Total Monthly Hours Part Time Employees</u>
----------------------------------	--	--	--

R.N.'s

L.P.N.'s

Nurse Aides

. . .

3. How many and of what category do you have positions budgeted for but unfilled?

4. Fill in the information requested below:

How many student nurses? _____

. . .

Application for Hospital License for period ending Dec. 31, 1966--Page 5

Appendix C

The data reported in this appendix were compiled by the Section of Hospitals and Medical Facilities of the Nebraska Department of Health, Marsha Numm, Sociologist.

Table C-1

PERSONNEL EMPLOYED IN THE LICENSED NURSING HOMES BY
EMPLOYMENT STATUS, NEBRASKA, 31 JANUARY 1967

	Employment Status					
	<u>Total</u>	<u>Administrator</u>	<u>Full Time</u>	<u>Part Time</u>	<u>On Call</u>	<u>Unknown</u>
Registered Nurses	199	23	96	59	4	17
Licensed Prac- tical Nurses	104	20	57	9	4	14
Nurses Aides	1,230	-	806	341	8	75

Table C-2

SIZE OF HOSPITAL BY NURSING PERSONNEL EMPLOYED AND VACANCIES, NEBRASKA, DECEMBER 1966

	R.N.'s			L.P.N.'s			Nurses Aides		
	Full Time	Part Time	Needed**	Full Time	Part Time	Needed**	Full Time	Part Time	Needed**
Total (N=129)*	1,899	1,328	378	633	142	160	3,988	1,451	273
0-20 (N=21)	44	62	8	9	9	4	93	102	13
21-30 (N=30)	107	126	15	94	9	7	227	218	14
31-50 (N=30)	136	209	13	55	18	1	301	266	14
51-75 (N=8)	75	79	9	48	9	7	170	124	7
76-100 (N=10)	152	112	26	36	8	12	309	150	22
101-150 (N=10)	187	115	13	56	15	14	443	140	14
151+ (N=20)	1,198	625	294	335	74	115	2,445	451	189

*Figures for 1966 do not include federal hospitals and also reflect changes in status and existence of hospitals in Nebraska during 1966.

**Seventy-six hospitals did not respond to this item; 17 reported needs but made no estimate.

Table C-3

TYPE OF INSTITUTION BY NURSING PERSONNEL EMPLOYED AND VACANCIES, NEBRASKA, DECEMBER 1966

	R.N.'s			L.P.N.'s			Nurses Aides		
	Full Time	Part Time	Needed**	Full Time	Part Time	Needed**	Full Time	Part Time	Needed**
<u>Total (N=129)*</u>	<u>1,899</u>	<u>1,328</u>	<u>378</u>	<u>633</u>	<u>142</u>	<u>160</u>	<u>3,988</u>	<u>1,451</u>	<u>273</u>
General (N=89)	1,088	898	189	325	80	70	1,394	803	87
Chronic (N=6)	58	42	2	9	6	3	187	68	2
Mental (N=5)	135	20	106	15	-	8	1,079	57	99
Tuberculosis (N=1)	4	-	3	-	-	-	36	2	1
Mentally Retarded (N=1)	10	2	-	1	-	-	387	-	-
General & Mental (N=3)	294	129	63	124	29	67	324	139	70
General & Chronic (N=24)	310	237	15	159	27	12	581	382	14

*Figures for 1966 do not include federal hospitals and also reflect changes in status and existence of hospitals in Nebraska during 1966.

**Seventy-six hospitals did not respond to this item; 17 reported needs but made no estimate.

Table C-4

TYPE OF OWNERSHIP OF HOSPITAL BY NURSING PERSONNEL EMPLOYED AND VACANCIES, NEBRASKA, DECEMBER 1966

	R.N.'s			L.P.N.'s			Nurses Aides		
	Full Time	Part Time	Needed**	Full Time	Part Time	Needed**	Full Time	Part Time	Needed**
Total (N=129)*	1,899	1,328	378	633	142	160	3,988	1,451	273
Proprietary (N=8)	13	34	4	9	5	2	48	51	4
Non-Profit Organi- zation (N=76)	1,377	1,014	235	509	98	126	1,823	1,032	118
County (N=23)	196	162	2	35	27	1	382	242	4
State (N=11)	206	51	129	45	4	18	1,582	68	114
City (N=11)	107	67	8	35	8	13	153	58	33

*Figures for 1966 do not include federal hospitals and also reflect changes in status and existence of hospitals in Nebraska during 1966.

**Seventy-six hospitals did not respond to this item; 17 reported needs but made no estimate.